



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,869	06/14/2006	Bernd Hansen	51336	5951
1609 7590 02/01/2012 ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P. 1300 19TH STREET, N.W. SUITE 600 WASHINGTON,, DC 20036			EXAMINER TRUONG, THANH K	
			ART UNIT 3721	PAPER NUMBER
			MAIL DATE 02/01/2012	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* BERND HANSEN

---

Appeal 2009-013993  
Application 10/582,869  
Technology Center 3700

---

Before STEVEN D.A. McCARTHY, STEFAN STAICOVICI, and  
KEN B. BARRETT, *Administrative Patent Judges*.

STAICOVICI, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

Bernd Hansen (Appellant) appeals under 35 U.S.C. § 134 from the Examiner's decision to reject under 35 U.S.C. § 112, second paragraph, claim 14, as being indefinite; under 35 U.S.C. § 102(b) claims 12-14 and 17-25 as anticipated by Hansen (DE 100 63 282 C2, published Jul. 4, 2002)<sup>1</sup> and claims 12-14, 17, 20 and 22-25 as anticipated by Furui Koichi (JP S60-49919 A, published Mar. 19, 1985); and under 35 U.S.C. § 103(a) claims 15, 16 and 26 as unpatentable over Hansen and Zelina (US 2002/0159915 A1, published Oct. 31, 2002). Claims 1-11 have been canceled. We have jurisdiction over this appeal under 35 U.S.C. § 6.

## THE INVENTION

The Appellant's invention relates to a method and a device for producing and filling containers. Spec. 1, ll. 2 and 10 and fig. 1a-1c.

Claims 12 and 24 are representative of the claimed invention and read as follows:

12. A method of producing and filling containers, comprising the steps of:
  - extruding a tube of softened plastic material into an open mold;
  - closing the tube at a projecting end thereof by closing the mold to form a bottom of a container;
  - separating the tube above the mold by a separating element to form a filler opening;

---

<sup>1</sup> Appellant acknowledges the Examiner's use of Hansen (US 2004/0065983 A1, published Apr. 8, 2004) as the English translation for Hansen (DE 100 63 282 C2). App. Br. 5. See also Ans. 3. As such, throughout this appeal, when we cite to Hansen, we shall be referring to Hansen (US 2004/0065983 A1).

- moving the mold with the tube having the filler opening in the mold into a filling position;
- after the tube is formed into the container by generating a pressure gradient acting on the tube in the mold to expand the tube, filling the container through the filler opening;
- sealing the filler opening;
- covering the filler opening by a sterile barrier at least from a formation time for the filler opening to filling of the tube; and
- conveying at least one sterile medium in a direction of the filler opening from the sterile barrier by a media delivery device.

24. A device for producing and filling containers, comprising:

- at least one mold having mold parts movable between open and closed positions;
- an extruder for extruding at least one tube of softened plastic material in said mold with said mold parts in said open positions;
- welding edges on said mold parts for welding a projecting end of the tube to form a container bottom;
- a pressure gradient generator acting on and expanding the tube in said mold;
- a movable separating element for forming a filler opening by separating the tube, said separating element being movable above the mold between a retracted position and an operating position;
- a filling device in a sterile filling space;
- a displacement device moving said mold between an extrusion position below said extruder and a filling position below said filling device in said sterile filling space;
- a sterile barrier covering the filler opening of the tube in said mold from formation thereof to filling of the tube in said sterile filling space; and
- a media deliverer, coupled to said sterile barrier, for conveying sterile medium in a direction of the filler opening.

## SUMMARY OF DECISION

We REVERSE.

## OPINION

### *The § 112, second paragraph, rejection*

Dependent claim 14 requires that the sterile medium is conveyed at “a specified over-pressure” in the direction of the filler opening. App. Br., Claims Appendix. The Examiner takes the position that the phrase “a specified over-pressure” is vague and indefinite. Ans 3. According to the Examiner, it is unclear as to what pressure “a specified over-pressure” is referring. *Id.*

It is well established that the test for definiteness under 35 U.S.C. § 112, second paragraph, is whether “those skilled in the art would understand what is claimed when the claim is read in light of the specification.” *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986) (citations omitted). In this case, Appellant’s Specification discloses that conveyance of sterile medium 34 to the cover plate 30 and through media exit points 38 in the direction of fill opening 18 is effected by “excess or overpressure, i.e., a pressure greater than ambient air pressure.” Spec. 6, ll. 6-8. *See also* App. Br. 4. As such, we find that a person of ordinary skill in the art would understand that “a specified over-pressure” means “a predetermined pressure greater than ambient air pressure.” As such, we conclude that the claim language, when read in light of the Specification, is not indefinite. Accordingly, claim 14 is not indefinite under 35 U.S.C. § 112, second paragraph. Hence, the rejection of dependent claim 14 cannot be sustained.

*The anticipation rejection based upon Hansen*

Independent claim 12 requires the method step of “conveying at least one sterile medium in a direction of the filler opening from the sterile barrier by a media delivery device.” Similarly, independent claim 24 requires a media deliverer, coupled to a sterile barrier, “for conveying sterile medium in a direction of the filler opening.” App. Br., Claims Appendix. The Examiner found that (1) heated plate 23 (sterile barrier) of Hansen covers filler openings 15 of softened plastic material tubes 3; and (2) heated plate 23 (sterile barrier) of Hansen heats the surrounding air, wherein the surrounding heated air constitutes the claimed sterile medium. Ans. 4. According to the Examiner, since heated plate 23 (sterile barrier) of Hansen is heated to a “germ-killing” temperature, the air surrounding heated plate 23 (sterile barrier) is also being heated. Ans. 8. As such, the Examiner concludes that because the heat source is ongoing (continuously), the surrounding air (sterile medium) is also being heated continuously (i.e., convection/radiation heat transfer. Therefore, according to the Examiner, the heated air (sterile medium) surrounding heated plate 23 (sterile barrier) of Hansen is also expanding continuously, hence propagating to continuously replace the surrounding cool air and cover the area surrounding mold 6, and thus protecting (sterilizing) fill openings (15) of softened plastic material tubes 3. Ans. 8-9.

As such, based on our understanding, the Examiner appears to take the position that the heated air surrounding heated plate 23 (sterile barrier) of Hansen constitutes a sterile medium that circulates between the heated plate 23 and fill openings 15 of tubes 3. In other words, we understand the

Examiner's position to mean that heated plate 23 and fill openings 15 of tubes 3 are spaced apart (i.e., not touching) so as to allow for air to circulate and be heated to a "germ-killing" temperature .

While Appellant agrees that heated air may be generated by heated plate 23, Appellant argues that the heated air is not necessarily delivered in the direction of fill openings 15. App. Br. 7. Reply Br. 3.

We agree. In this case, we find that Hansen teaches a heated plate 23 having a heated cutting edge 21 positioned on its front edge, wherein heated plate 23 covers (i.e., serves as a sterile barrier to) fill openings 15 of tubes 3 as the openings 15 in the tubes 3 are being formed. See Hansen, paras. [0019-0020]. Hansen further teaches that fill openings 15 are formed in the process of severance of extruded tubes 3 by cutting edge 21 of heated plate (sterile barrier) 23. See Hansen, para. [0022]. Severance of extruded tubes 3 by cutting edge 21 of heated plate (sterile barrier) 23 is indicative of direct contact between heated plate 23 (sterile barrier) and the fill openings 15 of the extruded tubes 3. In other words, heated plate 23 (sterile barrier) not only covers fill openings 15, but is also in direct contact (touching) with fill openings 15. Hence, in contrast to the Examiner's position, we do not find that heated plate 23 and fill openings 15 of tubes 3 are spaced apart. As such, heated air (sterile medium) surrounding heated plate 23 (sterile barrier) will not circulate between heated plate 23 (sterile barrier) and fill openings 15 of tubes 3, as the Examiner contends. Therefore, the Examiner's finding that the heated air surrounding heated plate 23 of Hansen constitutes the claimed sterile medium is mere speculation and conjecture based on an unfounded assumption that heated plate 23 and fill openings 15 of tubes 3



are spaced apart (i.e., not touching) so as to allow for air to circulate and be heated to a “germ-killing” temperature.

Accordingly, Hansen does not teach all the limitations of independent claims 12 and 24 or their respective dependent claims 13, 14, 17-23 and 25.

Therefore, the rejection of claims 12-14 and 17-25 under 35 U.S.C. § 102(b) as anticipated by Hansen cannot be sustained.

*The anticipation rejection based upon Furui Koichi*

Independent claim 12 requires the method step of “covering the filler opening by a sterile barrier at least from a formation time for the filler opening to filling of the tube.” Similarly, independent claim 24 requires “a sterile barrier covering the filler opening of the tube in said mold from formation thereof to filling of the tube in said sterile filling space.” App. Br., Claims Appendix.

The Examiner takes the position that Furui Koichi teaches that sterile chamber 12 (barrier) covers the filler opening of tube 6 from the time of the filler openings’ formation to filling of tube 6. Ans. 7. *See also* Furui Koichi, figs. 2 and 3(a)-(c). Appellant argues that sterile chamber 12 (barrier) of Furui Koichi does not cover the filler opening of tube 6 from its formation to filling of tube 6, as required by independent claims 12 and 24. App. Br. 12-14. *See also* Reply Br. 4.

In this case, like Appellant, we find that tube 6 of Furui Koichi is cut (via cutter 9) forming the filling opening before being positioned under molding and filling device 2. *See* Furui Koichi, figs. 1(a) and 1(b). During movement from extrusion device 1 to molding and filling device 2, the filling opening of tube 6 is not covered by sterile chamber 12. *See* Furui



Koichi, figs. 1(a) and 1(b). As such, we agree with Appellant that the filling opening of tube 6 is “exposed to contamination before being covered by the sterile chamber 12.” Reply Br. 4.

Hence, we find that Furui Koichi fails to teach a sterile barrier covering the filling opening of the tube from formation thereof to filling of the tube, as required by independent claims 12 and 24. Accordingly, for the foregoing reasons, the rejection of independent claims 12 and 24, and their dependent claims, 13, 14, 17, 20, 22, 23 and 25, under 35 U.S.C. § 102(b) as anticipated by Furui Koichi is not sustained.

*The obviousness rejection based upon Hansen and Zelina*

The addition of Zelina does not remedy the deficiencies of Hansen as described above. As such, the rejection under 35 U.S.C. § 103(a) of claims 15, 16 and 26 as unpatentable over Hansen and Zelina likewise cannot be sustained.

DECISION

The decision of the Examiner to reject claims 12-26 is reversed.

REVERSED

JRG